



Early Journal Content on JSTOR, Free to Anyone in the World

This article is one of nearly 500,000 scholarly works digitized and made freely available to everyone in the world by JSTOR.

Known as the Early Journal Content, this set of works include research articles, news, letters, and other writings published in more than 200 of the oldest leading academic journals. The works date from the mid-seventeenth to the early twentieth centuries.

We encourage people to read and share the Early Journal Content openly and to tell others that this resource exists. People may post this content online or redistribute in any way for non-commercial purposes.

Read more about Early Journal Content at <http://about.jstor.org/participate-jstor/individuals/early-journal-content>.

JSTOR is a digital library of academic journals, books, and primary source objects. JSTOR helps people discover, use, and build upon a wide range of content through a powerful research and teaching platform, and preserves this content for future generations. JSTOR is part of ITHAKA, a not-for-profit organization that also includes Ithaka S+R and Portico. For more information about JSTOR, please contact support@jstor.org.

Smith and the mercantilists? In fact, the whole conception of the distinction between the use and the abuse of any economic institution rests upon the idea of a compromise or a mean between untenable extremes. We may close with the well considered opinion of Professor Price—an opinion that is shared by Britishers like Edgeworth, Nicholson, and Scott, and by Americans like the two Adamsses, Bullock, and Plehn—that: “The problem of distributing the weight of war finance equitably between the living and future generations, has not, we opine, been relegated to the limbo of the otiose or obsolete; and here, as elsewhere, a *via media* is probably the best path for discreet efficient statesmanship to tread.”⁷ If Professor Patten desires to become an advisor to statesmen, I recommend his pondering this sentence.

EDWIN R. A. SELIGMAN.

⁷ Price, *op. cit.*, p. 157.

“METHODS OF PROVIDING FOR NEW BUSINESS EXPENSES BY LIFE INSURANCE COMPANIES”: A REPLY

The premium charged for life insurance contracts today is predicated on certain assumptions regarding the rate of mortality which will probably be experienced, the interest rate earned on invested assets, and the rate of expenditure necessary to the several operations of life insurance administration. In the advance determination of the premium to be charged the policyholder the net or mortality premium is first calculated—that portion which is calculated on the basis of mortality and interest assumptions to care for the policyholder's share of average mortality costs. Mortality costs are thus allocated always on the basis of averages-mutuality, some one has called it. That is, a particular policyholder may pay a far smaller amount in net (mortality) premiums than the amount paid to his beneficiary at the maturity of his policy, or he may pay far more than this amount. On the *average*, for such is insurance, they balance. But such is not necessarily the case with the loading element of the premium, the part which cares for expenses. It seems to be a matter of fair agreement that in so far as possible each policyholder shall pay the expenses incident to his own policy. This principle is accepted in a recent discussion of the problem of new business expenses.¹ The principle cannot be adhered to for the first five or six years after a policy is issued, for these early years constitute the period of heavy expense, and the loading cannot be made level

¹ H. L. Rietz, in THE AMERICAN ECONOMIC REVIEW, Dec., 1917, p. 832.

over the life of the policy and at the same time sufficient these first few years to pay the excessive expenses incident to the issue of the policy. To put it concretely, a participating ordinary life policy at age 35 may be issued for \$27 annual premium. In the original calculations this amount represents, in round numbers, \$21 net, or mortality premium and \$6 expense loading. The expense on this policy during the year of issue will be far in excess of \$6; hence if the policy should mature this year it will not entirely have paid its expense costs from its own loadings.

The problem of new business expenses, which is discussed in the article cited above, is essentially a problem of finding a source from which to draw the funds for these large early expenditures, while at the same time maintaining the two principles stated above—that mortality costs shall be paid on the basis of averages while expenses shall be paid as nearly as possible by each policyholder.

It must be remembered that the state holds life insurance companies to rigid accountability for the funds which they collect from policyholders. For this purpose each premium may be considered as made up of three elements: current mortality, reserve for future liabilities, and loading. The state, in effect, permits the company to spend necessary amounts from the first and third elements, but the reserve must be accredited to the policyholder. This element, like the "net" portion of the premium in the calculations of the company, is based on an assumption regarding future mortality experience and future interest earnings. The essential principle involved in this disposition of life insurance premiums lies in this—that there is a definite fund for a definite purpose: a current mortality fund for current mortality purposes, a reserve fund for maintenance of reserves, and a loading fund for payment of expenses; and if participating policies are issued on this basis, then savings from any of these three elements shall return to the policyholder on the form of dividends.² This statement is based on the presupposition that the original assumptions are adequate to carry out the purposes of the company—that the net premium will on the average pay insurance (mortality) costs and accumulate funds which compounded at a stated interest rate will equal the face of the policy at maturity; and that the expense loading will pay all expenses on the policy. Each policy will, however, not be able to pay its initial expense costs from initial loadings, but if the principle is followed that it

² Since participating insurance largely sets standards for premiums the discussion may be confined to participating policies.

shall pay its own expense costs it must within a few years show sufficient loadings in excess of current yearly costs to care for the excess of expenses over loading the first year. If this may be accepted as a correct principle it then follows that net premiums may be used only for mortality provision and that loadings may be used only for expenses; that if practical administrative policy requires the *appropriation* of one element to support the other this appropriation shall be temporary and shall be replaced at the earliest possible moment.

The methods used at present to pay the heavy expenses of the first year on policies are three: (1) payment from accumulated surplus; (2) the use of modified preliminary-term valuation; and (3) select and ultimate valuation. The first method is available only to large companies which have a considerable surplus; the attempt to use it with small companies means swift and sure death. The second may be used by most companies not subject to the valuation laws of New York state, where the third method is in force.

The question of "criticism" of preliminary-term valuation, or "defense" of select and ultimate, which is raised in the article referred to above reduces to this proposition: Do these methods maintain the principle that net premiums shall be used only for mortality, with return of savings in the form of dividends; and that loadings shall be used only for expenses, with like return of savings in the form of dividends? In contrasting these two methods of valuation it does not meet the issue to say that the full net premium standard of valuation is too high. If it is too high, dividends will be larger or the funds will be accumulated earlier. There is no justification thereby in spending the excess for new business. The issue may be stated in another way thus: Do these modifications of full net premium valuation maintain the principle that mortality costs shall be averaged, but that expense costs shall be paid by each policyholder as incurred? If they compel a full accounting for new business expenses within a few years after the issue of the policy, sufficient in number for excess loadings to pay the expense debt of the first year, then the policy may be said to have paid its own expense costs, otherwise not.

The division of our illustrative premium into two funds, \$21 net and \$6 loading, makes it possible to carry out the above principle. The \$21 will pay current mortality costs and accumulate a reserve which on assumed interest and mortality rates will at age 96 equal \$1,000. The \$6 loading will put the policy on a self-supporting basis in a very few years. If now it is desirable to reserve on a lower basis, in other words, to bring the interest and mortality assumptions more in accord with

experience, it may be done, but it should result in a lower net premium with no increase in the loading charge, since the \$6 loading over the life of this policy is all-sufficient.

These facts furnish the basis on which the two methods of valuation may be compared. Both being means of modifying full net premium valuation so as to release funds from the first premium to pay new business expenses it is desired to know whether these released funds are eventually taken from the net premium or from the loading element. If from the first, all reserves thereafter will be smaller than full net premium reserves; if from the second, later reserves will be unaffected. The terminal reserves on a twenty year endowment issued at age 35, American Experience 3 per cent basis are:

	<i>First year</i>	<i>Tenth year</i>
1. Full net premium standard.....	\$34.59	\$407.45
2. Modified preliminary-term standard.....	21.99	399.71
3. Select and ultimate standard.....	28.35	407.45

These figures show that both modifications result in smaller reserves the first year than required by the full standard; but that by the tenth year under modified preliminary-term the reserves are still below the full standard, while under select and ultimate the full standard is again maintained. Concretely, the fundamental difference between the two is this, that with select and ultimate the expenses from new business shall not be so great that they cannot be made good from margins in loadings accruing during the first five years, while with preliminary-term methods this full reserve is never reached until the premium payments on the policy³ are completed—20 years on the endowment used in the illustration. The one method compels an early accounting for new business expenses, the other does not. The one method pays new business expenses from margins in loading during the first five years, the other distributes it on the basis of averages over the life of the policy. The latter thus violates the principle with which we began, and which was accepted by Professor Rietz in his defense of preliminary term. The one standard denies the right of unlimited expansion with the privilege of putting off for years the day of reckoning; the other grants that somewhat questionable privilege.

BRUCE D. MUDGETT.

University of Washington.

³ There is a modification of preliminary term in New Jersey which requires that full standard reserves be maintained after seven years. In practical effect this is identical with select and ultimate valuation.